

Appl. No. 10/605,416
Amdt. Dated March 31, 2005
Reply to Office action of December 01, 2004

REMARKS/ARGUMENTS

In the specification, paragraph [0020], [0022] and [0027] are added "And, the recess structures comprise the convex structures and valley structures." That is supported by Figs. 3 and 4. Obviously, the color filters 25, 45 have a plurality of convex structures and valley structures in Figs. 3 and 4. There is no new matter.

Claims 1 and 8 have been amended to add "a color filter is covered with one of the upper and the lower transparent electrode directly". That amendment is supported by Figs. 3 and 4, paragraphs [0019] and [0022]. Fig. 3 shows the color filter 25 is covered with the transparent electrode 24 directly and the color filter 45 in Fig. 4 is also covered with the transparent electrode 44 directly. Claims 16 and 18 are supported by Figs. 3 and 4. The amendment of Claims 17 and 19 are supported by paragraph [0025]. The Applicant's invention mentions the recess structures are able to scatter light in paragraph [0025]. The new Claims 20 to 29 are cited by paragraphs [0019] to [0028] and Figs. 3 and 4. The plurality of thin film transistors positioned on the top surface of the lower glass substrate 29 is noted in paragraphs [0019]. No new matter is added.

Claims 1, 3-4, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al U.S. Patent No. 6,618,107 and Kim et al U.S. Patent Application Publication No. 2002/0018159.

1. Claims 1, 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al U.S. Patent No. 6,618,107 :

The reasons of record that can be found on page 2 in the Office action.

Response:

Tanaka et al mentions the overcoat layer 8 is between the color filter 7 and ITO 9 (col. 7, lines 54 to 67). Fig. 1 of US 6,618,107 shows the lower driving electrode Indium Tin Oxide 9 isn't being covered the color filter 7 directly. But transparent electrode 24 is covered on the color filter 25 directly in the Applicant's invention (Fig. 3).

Appl. No. 10/605,416
Amdt. Dated March 31, 2005
Reply to Office action of December 01, 2004

Obviously, the structure of the Applicant's invention is different from US 6,618,107. Besides, the Applicant's invention mentions the prior art needs the overcoat layer because of the non-uniform cell gap (paragraph [0007]). The paragraph [0027] of the Applicant's invention notes the problem of a non-uniform cell gap can be prevented, so the
5 Applicant's invention has no overcoat layer. And, the Applicant's invention could decrease the manufacture cost and the process. The Applicant's invention is distinguish from Tanaka et al. Thus, Claims 1, 3-4 are patentably distinguishable from Tanaka et al U.S. Patent No. 6,618,107.

- 10 2. Claims 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al U.S. Patent Application Publication No. 2002/0018159 :

The reasons of record that can be found on page 3 in the Office action.

Response:

First, Kim et al noted the overcoat layer 204 levels the surface of the color resin
15 layer 202 (paragraph [0037]). Please refer to Fig. 2A of Kim et al, it is obvious the overcoat layer 204 is between the color resin layer 202 and the transparent electrode 203. But the Applicant's invention is without overcoat layer and the transparent electrode is covered with the color filter directly. Because the Applicant's invention has no non-uniform cell gap (paragraph [0027]), the Applicant's invention doesn't need the overcoat layer. The
20 Applicant's invention is different from Kim et al and decreases the cost and process. Second, the recess structures of Kim et al pass through the color resin layer, they are holes of the color resin layer (Fig. 2A and Fig. 4A). But, the recess structures of the Applicant's invention comprise the valley structures, shall not be holes of the color filter. Thus, Claims 8-10 are patentably distinguishable from Kim et al U.S. Patent Application
25 Publication No. 2002/0018159.

3. Claims 2, 5-7 and 11-15 are rejected under 35 U.S.C.103(a) as being unpatentable over Tanaka et al and Kim et al in view of Matsushita et al U.S. Patent No. 6,501,521.

The reasons of record that can be found on pages 4 and 5 in the Office action.

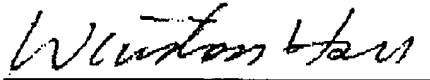
Appl. No. 10/605,416
Amdt. Dated March 31, 2005
Reply to Office action of December 01, 2004

Response:

Claims 1 and 8 are patentably distinguishable from Patent US6,618,107 and U.S. Patent Application Publication No. 2002/0018159 by the above-mentioned reasons. Their dependent claims are also patentably:

5 Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,



Date: March 31, 2005

10 Winston Hsu, Patent Agent No. 41,526
P.O. BOX 506, Merrifield, VA 22116, U.S.A.
Voice Mail: 302-729-1562
Facsimile: 806-498-6673
e-mail : winstonhsu@naipo.com

15

Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan).